

Ehrlichiosis

What is ehrlichiosis?

Ehrlichiosis is a tickborne disease of humans and animals caused by bacteria named Ehrlichia. The bacteria are transmitted by ticks and can infect two different types of white blood cells. The first human case in the U.S. was reported in 1986, in a man exposed to ticks in Arkansas.

Who gets ehrlichiosis?

Anyone can get ehrlichiosis, although the majority of known cases have been in adults. People who spend time outdoors in tick-infested areas from April until October are at greatest risk for exposure.

How is the disease spread?

The bacteria are transmitted to humans by the bite of an infected tick, including the deer tick, the dog tick and the Lone Star tick. Ehrlichiosis cannot be spread from person to person.

What are the symptoms of ehrlichiosis?

The most common symptoms are fever, chills, muscle aches, weakness and headache. Patients also may experience confusion, nausea, vomiting and joint pain. Unlike Lyme disease or Rocky Mountain spotted fever, a rash is not common. Infection usually produces mild to moderately severe illness, with high fever and headache, but may occasionally be life-threatening or even fatal.

When do symptoms appear?

The incubation period is usually one to three weeks after exposure to an infected tick. However, not every exposure results in infection.

How is ehrlichiosis diagnosed?

Special laboratory tests can detect recent infection with the Ehrlichia bacteria. Other laboratory findings may include low white blood count, low platelet count and abnormal liver enzyme tests. Because diagnostic tests are not readily available, the diagnosis of ehrlichiosis should be made based on clinical symptoms and a history of exposure to ticks.

What is the treatment?

Tetracycline antibiotics are usually rapidly effective for ehrlichiosis. Because these antibiotics can cause dental staining in children, physicians should consult an infectious disease expert when treating children.

How can I prevent ehrlichiosis?

As with Lyme disease, avoiding tick bites will prevent ehrlichiosis. When working or playing outdoors in tick-infested areas: wear light-colored clothing and tuck pants into socks, tuck shirt into pants; apply repellents containing DEET to exposed skin and

clothing; use repellents sparingly and avoid prolonged or excessive applications, especially in children; check clothes and body surfaces carefully during and after being outdoors, especially in tick-infested areas.

How should a tick be removed?

Remove the tick as soon as possible. Use tweezers, grab the tick's mouth parts close to the skin and pull it straight out. Do not squeeze the tick's body when removing it, and do not handle the tick with bare hands. Contact a physician if there is concern that the tick was not completely removed. You may want to save the tick by placing it in a jar or plastic bag and freeze or add alcohol so that it can be identified by an extension agent.

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